

**REMARKS/ARGUMENTS**

Re-examination and favorable reconsideration in light of the following comments are respectfully requested.

Claims 1-5, 7-34, 36-41, and 43-48 are pending in the application. Currently, all claims have been rejected.

In the office action mailed March 14, 2005, all of the pending claims were rejected under 35 U.S.C. 101. The Examiner has erroneously taken this position by misreading a statement on page 19, item 16, line 5 of the earlier response that the method of the present invention does not manifest the requirement of concreteness. The method as disclosed in the application and as set forth in the claims is repeatable. The Examiner fails to appreciate that in implementing the method of the present invention, there are variables. As a result of the variables, you are going to get different results for different scenarios. However this does not mean that the method does not meet the requirements of 35 U.S.C. 101. In fact, any method which is implemented has variable results. It is submitted that the claimed invention meets the concreteness requirements of 35 U.S.C. 101. The method steps are clearly set forth in the claims. It should be noted that there is a difference between difference in results due to variable inputs and repeatability. The Examiner seems to miss this point.

Further in the office action, claims 1-41 were rejected under 35 U.S.C. 112, first paragraph. The Examiner takes the position that the details of how one steps from the chromosomes to a fully descriptive model are not identified in any integrated manner and such step is non trivial. The Examiner's position is in error. It is submitted that the Examiner has not made out a prima facie case of non-enablement. In particular, the Examiner has not indicated why one of ordinary skill in the

art having the step by step teaching contained in the specification and drawings could not make and use the claimed invention, particularly the claimed method and the claimed system. As stated in *In re Armbruster*, 185 USPQ 152, 153 (CCPA 1975), quoting from *In re Marzocchi*, 169 USPQ 367, 369-70 (CCPA 1971), "it is incumbent upon the Patent Office, whenever a rejection on this basis [lack of enablement] is made, to explain why it doubts the truth or accuracy of any statement in a supporting disclosure and to back up assertions of its own with acceptable evidence or reasoning which is inconsistent with the contested statement". The Examiner has still not put into the record any evidence or reasoning as to why one could not perform the claimed method and/or use the claimed system. In other words, the Examiner has not provided Applicants with the reasons behind his conclusion. In particular, the Examiner has not provided any reason why one could not make and/or use the chromosome which is set out in claims 41 and 43-48. In Applicants' opinion, the specification contains sufficient guidance so that one of ordinary skill in the art could make and use the claimed invention without undue experimentation. Even if some experimentation were needed, and Applicants believe none is needed, such experimentation would be permissible. See *Ex parte Jackson*, 217 USPQ 804, 807 (BPAI 1982); also see *Hybritech, Inc. v. Monoclonal Antibodies, Inc.*, 231 USPQ 81, 94 (Fed. Cir. 1986). Where a specification, such as the instant one, provides guidance in selecting parameters that would yield the claimed result as well as a lot of other details, it is fair to conclude that the experimentation required to make a particular embodiment is not "undue". See *In re Colianni*, 195 USPQ 150, 153 (CCPA 1977); also see *In re Wands*, 8 USPQ2d 1400, 1406 (Fed. Cir. 1988).

Again, one point which the Examiner does not seem to understand is that the digital chromosomes directly become an equation when the zeros and ones of binary are transformed into base 10 numbers. This transformation of binary to base 10 is the basis of all modern digital computer technology and is therefore trivial. Segment boundaries as depicted in figures 1 and 5 define the start and end points of specific items in the equation. The chromosome is the equation written in binary code. Note that figure 3 in the application shows an example of binary to base 10 conversion.

In light of the foregoing, the Examiner is hereby requested to withdraw the rejection under 35 U.S.C. 112, first paragraph.

Finally in the office action, the Examiner rejected claims 1-5, 7-34, 36-41, and 43-48 under 35 U.S.C. 102(b) as being anticipated by or, in the alternative, under 35 U.S.C. 103(a) as being obvious over the Michalewicz reference of record.

As stated in the previous response, Michalewicz does not anticipate the present invention. The reasons why Michalewicz does not anticipate the reference are set forth in that response and are incorporated by reference herein.

With respect to the obviousness aspect of the rejection, the Examiner has not set forth a proper obviousness rejection. The Examiner has not identified the differences between Michalewicz and the claimed invention and has not provided anything in the prior art which would teach or suggest to one of ordinary skill in the art how to make the claimed invention given the differences. Nor is there any discussion in the rejection of what would motivate one of ordinary skill in the art to arrive at the claimed invention given the fact that there are differences between what is being claimed and what is being taught by Michalewicz.

For the foregoing reasons, the instant application is believed to be in condition for allowance. Such allowance is respectfully solicited.

Should the Examiner believe an additional amendment is needed to place the case in condition for allowance, he is hereby invited to contact Applicants' attorney at the telephone number listed below.

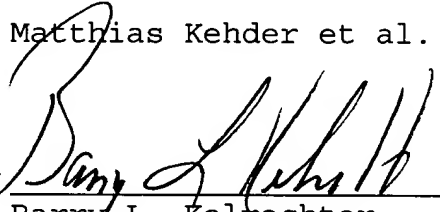
A Petition for a three month extension of time is enclosed herewith. Also enclosed is a check in the amount of \$510.00 to cover the cost of the three month extension of time.

Should the Director determine that an additional fee is due, he is hereby authorized to charge said fee to Deposit Account No. 02-0184.

Respectfully submitted,

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By

  
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I, Nicole Motzer, hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: "Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313" on September 13, 2005.

